

PATENT COOPERATION TREATY

BERGGREN OY AB
14-09-2005

From the
INTERNATIONAL PRELIMINARY EXAMINING AUTHORITY

To:

Berggren Oy AB
P.O. Box 16
FIN-00101 Helsinki
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MAK/TLA

PCT

WRITTEN OPINION OF THE
INTERNATIONAL PRELIMINARY
EXAMINING AUTHORITY

(PCT Rule 66)

Date of mailing
(day/month/year)

12-09-2005

Applicant's or agent's file reference

BP108109/MAK

REPLY DUE

within 60 days from
the above date of mailing

11.11.05

International application No.

PCT/FI2003/000972

International filing date (day/month/year)

19-12-2003

Priority date (day/month/year)

International Patent Classification (IPC) or both national classification and IPC

H04M1/02

Applicant

Nokia Corporation et al

1. ☐ The written opinion established by the International Searching Authority:
☐ is ☐ is not
considered to be a written opinion of the International Preliminary Examining Authority.
2. This first (first, etc.) opinion contains indications relating to the following items:
 - ☒ Box No. I Basis of the opinion
 - ☐ Box No. II Priority
 - ☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
 - ☐ Box No. IV Lack of unity of invention
 - ☒ Box No. V Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
 - ☐ Box No. VI Certain documents cited
 - ☐ Box No. VII Certain defects in the international application
 - ☐ Box No. VIII Certain observations on the international application
3. The applicant is hereby invited to reply to this opinion.

When? See the time limit indicated above. The applicant may, before the expiration of that time limit, request this Authority to grant an extension, see Rule 66.2(e).

How? By submitting a written reply, accompanied, where appropriate, by amendments, according to Rule 66.3. For the form and the language of the amendments, see Rules 66.8 and 66.9.

Also For the examiner's obligation to consider amendments and/or arguments, see Rule 66.4bis.
For an informal communication with the examiner, see Rule 66.6.
For an additional opportunity to submit amendments, see Rule 66.4.

If no reply is filed, the international preliminary examination report will be established on the basis of this opinion.
4. The final date by which the international preliminary report on patentability (Chapter II of the PCT) must be established according to Rule 69.2 is: 19-04-2006

Name and mailing address of the IPEA/SE

Patent- och registreringsverket

Box 5055

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Authorized officer

Roland Landström /LR

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WRITTEN OPINION OF THE
INTERNATIONAL PRELIMINARY EXAMINING AUTHORITY

International application No.

PCT/FI2003/000972

Box No. 1 Basis of the opinion

1. With regard to the language, this opinion has been established on the basis of:

- ☒ the international application in the language in which it was filed
- ☐ a translation of the international application into _____
which is the language of a translation furnished for the purposes of:
- ☐ international search (Rules 12.3(a) and 23.1(b))
- ☐ publication of the international application (Rule 12.4(a))
- ☐ international preliminary examination (Rules 55.2(a) and/or 55.3(a))

2. With regard to the elements of the international application, this opinion has been established on the basis of (*replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this opinion as "originally filed."*):

- ☒ the international application as originally filed/furnished
- ☐ the description:
- pages _____ as originally filed/furnished
- pages _____ received by this Authority on _____
- pages _____ received by this Authority on _____
- ☐ the claims:
- pages _____ as originally filed/furnished
- pages _____ as amended (together with any statement) under Article 19
- pages _____ received by this Authority on _____
- pages _____ received by this Authority on _____
- ☐ the drawings:
- pages _____ as originally filed/furnished
- pages _____ received by this Authority on _____
- pages _____ received by this Authority on _____
- ☐ a sequence listing and/or any related table(s) – see Supplemental Box Relating to Sequence Listing.

3. ☐ The amendments have resulted in the cancellation of:

- ☐ the description, pages _____
- ☐ the claims, Nos. _____
- ☐ the drawings, sheets/figs _____
- ☐ the sequence listing (*specify*): _____
- ☐ any table(s) related to the sequence listing (*specify*): _____

4. ☐ This opinion has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).

- ☐ the description, pages _____
- ☐ the claims, Nos. _____
- ☐ the drawings, sheets/figs _____
- ☐ the sequence listing (*specify*): _____
- ☐ any table(s) related to the sequence listing (*specify*): _____

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Box No. V Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Claims	_____
	Claims	_____
Inventive step (IS)	Claims	_____
	Claims	<u>1 - 8</u>
Industrial applicability (IA)	Claims	_____
	Claims	_____

2. Citations and explanations:

The invention relates to a mobile phone assembly and is intended to cut down the number of separate parts, reduce time and stages in the assembly and reduce the costs of the complete mobile phone.

Reference is made to the following documents:

D1: US 4703160 A
D2: US 5541813 A
D3: US 5432676 A

Document D1 (column 3, line 55 - column 8, line 11, figures 1 - 5, abstract) discloses a base part (18, 16, 14, 12) for a portable electronic appliance (10). The base part (18, 16, 14, 12) consists of a (hard) body part (16, 14, 12) including a keypad (28), a window (18) and a soft middle part (24), which connects the body parts (18, 16, 14, 12). The window (18) is foldable against the (hard) body part (16) along a hinge line (24) created in the soft middle part (24). The base part (18, 16, 14, 12) is constructed of a resilient material so that the thinned narrow strip portion (24, 26) formed between every adjacent two parts (18, 16, 14, 12) provides an integral hinge joint (24, 26). Thus, the parts (18, 16, 14, 12) that are not thinned are hard compared to the hinge joints (24, 26). The base part (18, 16, 14, 12) is injection molded from an elastomer resin. The integral hinge reduces the number of components and simplifies the assembly of the appliance (column 10, lines 10 - 21).

.../...

Supplemental Box

In case the space in any of the preceding boxes is not sufficient.
Continuation of: BOX V

Document D2 (column 4, line 61 - column 8, line 5, figures 1 - 10, abstract) discloses a base part (6) for a mobile phone (1). The base part (6) consists of two hard body parts (6) and a soft middle part (7), which connects the hard body parts (6). One of the hard body parts (6) is foldable against the other hard body part (6) along a hinge line (7) created in the soft middle part (7). The base part (6) is manufactured by injection molding with a first injection mold (33, 36, 25, 20) producing two hard body parts (6) of hard plastic (6a), and injection molding with a soft polyurethane resin producing a soft middle part (7a) which has a hinge line (7a) to fold up one of the hard body parts (6) against the other hard body part (6).

Document D3 (column 4, line 61 - column 8, line 28, figures 1 - 10, abstract) discloses a similar technique.

The invention claimed in claims 1 - 5 differs from what is known from document D1, the closest prior art, essentially in that the portable electronic appliance is a mobile phone.

The technical problem is how to find a new use for the base part of document D1.

Considering that a mobile phone is a well known example of a portable electronic appliance, wherein a reduction of the number of component members and elements in assembling the appliance is desirable, and that no unexpected technical effect is obtained, it would be obvious to suggest the use of the base part of document D1 for a mobile phone. Therefore, the invention claimed in claims 1 - 5 lacks an inventive step.

The invention claimed in claims 6 - 7 differs from what is known from document D1, the closest prior art, essentially in that the portable electronic appliance is a mobile phone and that the injection molding is performed with hard plastic for the window and the hard body part, and with a soft elastomer for the soft middle part.

The technical problem is how to find a new use for the base part of document D1 and how to find an alternative method of manufacture.

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Supplemental Box

In case the space in any of the preceding boxes is not sufficient.
Continuation of: BOX V

A person skilled in the art finds this method of manufacture from document D2, which relates to a mobile phone. Considering this and that no unexpected technical effect is obtained, it would be obvious to suggest manufacturing the base part of document D1 using the technique of document D2 and using the base part for a mobile phone.

Therefore, the invention claimed in claims 6 - 7 lacks an inventive step.

The invention claimed in claim 8 is obvious to a person skilled in the art. Therefore, the invention claimed in claim 8 lacks an inventive step.

To sum up, the invention claimed in claims 1 - 8 lacks an inventive step.